



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 21-0221

Project: 21-0221, Piney Point - Phase 2 - Reported by Floyd Wellborn

April 19, 2021

**MEMORANDUM**

**SUBJECT:** FINAL Analytical Report  
Project: 21-0221, Piney Point - Phase 2

**FROM:** Floyd Wellborn  
LSB Inorganic Chemistry Section Chief

**THRU:** Sandra Aker, Chief  
Laboratory Services Branch

**TO:** Floyd Wellborn

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at [www.epa.gov/region4/sesd/asbsop](http://www.epa.gov/region4/sesd/asbsop). Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

**Classical/Nutrient Analyses (CNA)**

Ammonia/TKN	EPA 351.2 (Water)	ISO
Classical/Nutrients	EPA 300.0 (Water)	ISO
Classical/Nutrients	EPA 300.0 (Water)	ISO/DW
Nitrate and/or Nitrite	EPA 353.2 (Water)	ISO/DW
Phosphorous	EPA 365.1 (Water)	ISO
Solids	USGS I-3765-85 (Water)	ISO



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**Sample Disposal Policy**

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at [R4SampleCustody@epa.gov](mailto:R4SampleCustody@epa.gov).

cc: Nardina Turner



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**SAMPLES INCLUDED IN THIS REPORT**

**Project: 21-0221, Piney Point - Phase 2**

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
Piney 9	E211612-01	Saline Water	4/14/21 12:45	4/15/21 11:20
Piney 8	E211612-02	Saline Water	4/14/21 12:10	4/15/21 11:20
Piney 6	E211612-03	Saline Water	4/14/21 11:25	4/15/21 11:20
Piney 3	E211612-04	Saline Water	4/14/21 10:35	4/15/21 11:20
Piney 18	E211612-05	Saline Water	4/14/21 10:10	4/15/21 11:20
Piney 17	E211612-06	Saline Water	4/14/21 11:25	4/15/21 11:20
Piney 7	E211612-07	Saline Water	4/14/21 12:00	4/15/21 11:20



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### DATA QUALIFIER DEFINITIONS

U	The analyte was not detected at or above the reporting limit.
D-4	MRL elevated due to interferences.
J	The identification of the analyte is acceptable; the reported value is an estimate.
QM-2	Matrix Spike Recovery greater than method control limits
QR-2	MRL verification recovery greater than upper control limits.

### ACRONYMS AND ABBREVIATIONS

CAS	Chemical Abstracts Service  Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System ( <a href="http://www.epa.gov/srs">www.epa.gov/srs</a> ), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.
MDL	Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.
MRL	Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.
TIC	Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

### ACCREDITATIONS:

ISO	Accredited to ISO/IEC 17025:2017 and accreditation requirements for Forensic Science Testing Laboratories.  Refer to the certificate and scope of accreditation FT-0330 at: <a href="http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd">http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd</a>
NR	Not accredited for this test.
DW	Accredited for conformance with ISO/IEC 17025:2017 and testing elements in the Fifth Edition of the Manual for the Certification of Laboratories Analyzing Drinking Water, EPA 815-R-05-004, 2005.  Refer to the certificate and scope of accreditation AT-2628 at: <a href="http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd">http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd</a>
ISO/DW	Accredited to ISO/IEC 17025:2017 and accreditation requirements for Forensic Science Testing Labs, and conformance with ISO/IEC 17025:2017 and testing elements in the Manual for the Certification of Laboratories Analyzing Drinking Water.



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## Classical/Nutrient Analyses

Project: 21-0221, Piney Point - Phase 2

Sample ID: Piney 9

Lab ID: E211612-01

Station ID: PINEY 9

Matrix: Saline Water

Date Collected: 4/14/21 12:45

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
E17148461	Total Kjeldahl Nitrogen	0.23	J, QR-2	mg/L	0.043 0.050	4/17/21 14:29	4/18/21 12:45	EPA 351.2
16887-00-6	Chloride	18000		mg/L	0.32 2.5	4/17/21 11:11	4/18/21 19:48	EPA 300.0
16984-48-8	Fluoride	3.0	U, D-4	mg/L	3.0 3.0	4/16/21 11:45	4/16/21 20:21	EPA 300.0
14808-79-8	Sulfate as SO4	2300		mg/L	0.48 2.5	4/17/21 11:11	4/18/21 19:48	EPA 300.0
E701177	Nitrate/Nitrite as N	0.019		mg/L	0.0093 0.050	4/16/21 12:48	4/16/21 16:17	EPA 353.2
14265-44-2	Orthophosphate as P	0.19		mg/L	0.0038 0.010	4/15/21 16:05	4/15/21 17:52	EPA 365.1
7723-14-0	Total Phosphorus	0.22		mg/L	0.0041 0.010	4/17/21 12:05	4/19/21 10:18	EPA 365.1
E1642818	Total Suspended Solids	23		mg/L	5.0	4/15/21 15:41	4/15/21 15:41	USGS 1-3765-85



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Project: 21-0221, Piney Point - Phase 2 - Reported by Floyd Wellborn

## Classical/Nutrient Analyses

Project: 21-0221, Piney Point - Phase 2

Sample ID: Piney 8

Lab ID: E211612-02

Station ID: PINEY 8

Matrix: Saline Water

Date Collected: 4/14/21 12:10

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
E17148461	Total Kjeldahl Nitrogen	0.35		mg/L	0.043 0.050	4/17/21 14:29	4/18/21 12:45	EPA 351.2
16887-00-6	Chloride	17000		mg/L	0.32 2.5	4/17/21 11:11	4/18/21 20:21	EPA 300.0
16984-48-8	Fluoride	3.0 U, D-4		mg/L	3.0 3.0	4/16/21 11:45	4/16/21 20:38	EPA 300.0
14808-79-8	Sulfate as SO4	2300		mg/L	0.48 2.5	4/17/21 11:11	4/18/21 20:21	EPA 300.0
E701177	Nitrate/Nitrite as N	0.024		mg/L	0.0093 0.050	4/16/21 12:48	4/16/21 16:17	EPA 353.2
14265-44-2	Orthophosphate as P	0.35		mg/L	0.0038 0.010	4/15/21 16:05	4/15/21 17:52	EPA 365.1
7723-14-0	Total Phosphorus	0.41		mg/L	0.0041 0.010	4/17/21 12:05	4/19/21 10:18	EPA 365.1
E1642818	Total Suspended Solids	13		mg/L	5.0	4/15/21 15:41	4/15/21 15:41	USGS 1-3765-85



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## Classical/Nutrient Analyses

Project: 21-0221, Piney Point - Phase 2

Sample ID: Piney 6

Lab ID: E211612-03

Station ID: PINEY 6

Matrix: Saline Water

Date Collected: 4/14/21 11:25

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
E17148461	Total Kjeldahl Nitrogen	0.24	J, QR-2	mg/L	0.043 0.050	4/17/21 14:29	4/18/21 12:45	EPA 351.2
16887-00-6	Chloride	18000		mg/L	0.32 2.5	4/17/21 11:11	4/18/21 20:54	EPA 300.0
16984-48-8	Fluoride	3.0	U, D-4	mg/L	3.0 3.0	4/16/21 11:45	4/16/21 20:55	EPA 300.0
14808-79-8	Sulfate as SO <sub>4</sub>	2300		mg/L	0.48 2.5	4/17/21 11:11	4/18/21 20:54	EPA 300.0
E701177	Nitrate/Nitrite as N	0.017		mg/L	0.0093 0.050	4/16/21 12:48	4/16/21 16:17	EPA 353.2
14265-44-2	Orthophosphate as P	0.17		mg/L	0.0038 0.010	4/15/21 16:05	4/15/21 17:52	EPA 365.1
7723-14-0	Total Phosphorus	0.20		mg/L	0.0041 0.010	4/17/21 12:05	4/19/21 10:18	EPA 365.1
E1642818	Total Suspended Solids	87		mg/L	5.0	4/15/21 15:41	4/15/21 15:41	USGS I-3765-85



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## Classical/Nutrient Analyses

Project: 21-0221, Piney Point - Phase 2

Sample ID: Piney 3

Lab ID: E211612-04

Station ID: PINEY 3

Matrix: Saline Water

Date Collected: 4/14/21 10:35

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
E17148461	Total Kjeldahl Nitrogen	0.47		mg/L	0.043 0.050	4/17/21 14:29	4/18/21 12:45	EPA 351.2
16887-00-6	Chloride	17000		mg/L	0.32 2.5	4/17/21 11:11	4/18/21 21:27	EPA 300.0
16984-48-8	Fluoride	3.0 U, D-4		mg/L	3.0 3.0	4/16/21 11:45	4/16/21 21:11	EPA 300.0
14808-79-8	Sulfate as SO <sub>4</sub>	2200		mg/L	0.48 2.5	4/17/21 11:11	4/18/21 21:27	EPA 300.0
E701177	Nitrate/Nitrite as N	0.026		mg/L	0.0093 0.050	4/16/21 12:48	4/16/21 16:17	EPA 353.2
14265-44-2	Orthophosphate as P	0.42		mg/L	0.0038 0.010	4/15/21 16:05	4/15/21 17:52	EPA 365.1
7723-14-0	Total Phosphorus	0.48		mg/L	0.0041 0.010	4/17/21 12:05	4/19/21 10:18	EPA 365.1
E1642818	Total Suspended Solids	110		mg/L	5.0	4/15/21 15:41	4/15/21 15:41	USGS I-3765-85





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## Classical/Nutrient Analyses

Project: 21-0221, Piney Point - Phase 2

Sample ID: Piney 18

Lab ID: E211612-05

Station ID: PINEY 18

Matrix: Saline Water

Date Collected: 4/14/21 10:10

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
E17148461	Total Kjeldahl Nitrogen	0.58		mg/L	0.043 0.050	4/17/21 14:29	4/18/21 12:45	EPA 351.2
16887-00-6	Chloride	14000 J, QM-2		mg/L	0.32 2.5	4/17/21 11:11	4/18/21 22:00	EPA 300.0
16984-48-8	Fluoride	3.0 U, D-4		mg/L	3.0 3.0	4/16/21 11:45	4/16/21 21:28	EPA 300.0
14808-79-8	Sulfate as SO4	1800		mg/L	0.48 2.5	4/17/21 11:11	4/18/21 22:00	EPA 300.0
E701177	Nitrate/Nitrite as N	0.026		mg/L	0.0093 0.050	4/16/21 12:48	4/16/21 16:17	EPA 353.2
14265-44-2	Orthophosphate as P	0.11		mg/L	0.0038 0.010	4/15/21 16:05	4/15/21 17:52	EPA 365.1
7723-14-0	Total Phosphorus	0.15		mg/L	0.0041 0.010	4/17/21 12:05	4/19/21 10:18	EPA 365.1
E1642818	Total Suspended Solids	82		mg/L	5.0	4/15/21 15:41	4/15/21 15:41	USGS I-3765-85



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## Classical/Nutrient Analyses

Project: 21-0221, Piney Point - Phase 2

Sample ID: Piney 17

Lab ID: E211612-06

Station ID: PINEY 17

Matrix: Saline Water

Date Collected: 4/14/21 11:25

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
E17148461	Total Kjeldahl Nitrogen	0.19	J, QR-2	mg/L	0.043 0.050	4/17/21 14:29	4/18/21 12:45	EPA 351.2
16887-00-6	Chloride	17000		mg/L	0.32 2.5	4/17/21 11:11	4/18/21 23:39	EPA 300.0
16984-48-8	Fluoride	3.0	U, D-4	mg/L	3.0 3.0	4/16/21 11:45	4/16/21 21:45	EPA 300.0
14808-79-8	Sulfate as SO <sub>4</sub>	2200		mg/L	0.48 2.5	4/17/21 11:11	4/18/21 23:39	EPA 300.0
E701177	Nitrate/Nitrite as N	0.0097		mg/L	0.0093 0.050	4/16/21 12:48	4/16/21 16:17	EPA 353.2
14265-44-2	Orthophosphate as P	0.054		mg/L	0.0038 0.010	4/15/21 16:05	4/15/21 17:52	EPA 365.1
7723-14-0	Total Phosphorus	0.067		mg/L	0.0041 0.010	4/17/21 12:05	4/19/21 10:18	EPA 365.1
E1642818	Total Suspended Solids	150		mg/L	5.0	4/15/21 15:41	4/15/21 15:41	USGS 1-3765-85



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## Classical/Nutrient Analyses

Project: 21-0221, Piney Point - Phase 2

Sample ID: Piney 7

Lab ID: E211612-07

Station ID: PINEY 7

Matrix: Saline Water

Date Collected: 4/14/21 12:00

CAS Number	Analyte	Results	Qualifiers	Units	MDL MRL	Prepared	Analyzed	Method
E17148461	Total Kjeldahl Nitrogen	0.26		mg/L	0.043 0.050	4/17/21 14:29	4/18/21 12:45	EPA 351.2
16887-00-6	Chloride	17000		mg/L	0.32 2.5	4/17/21 11:11	4/19/21 0:12	EPA 300.0
16984-48-8	Fluoride	3.0 U, D-4		mg/L	3.0 3.0	4/16/21 11:45	4/16/21 22:02	EPA 300.0
14808-79-8	Sulfate as SO <sub>4</sub>	2200		mg/L	0.48 2.5	4/17/21 11:11	4/19/21 0:12	EPA 300.0
E701177	Nitrate/Nitrite as N	0.015		mg/L	0.0093 0.050	4/16/21 12:48	4/16/21 16:17	EPA 353.2
14265-44-2	Orthophosphate as P	0.24		mg/L	0.0038 0.010	4/15/21 16:05	4/15/21 17:52	EPA 365.1
7723-14-0	Total Phosphorus	0.26		mg/L	0.0041 0.010	4/17/21 12:05	4/19/21 10:18	EPA 365.1
E1642818	Total Suspended Solids	130		mg/L	5.0	4/15/21 15:41	4/15/21 15:41	USGS I-3765-85



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Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2104042 - C 351.2 TKN

Blank (2104042-BLK1)

Prepared: 04/17/21 Analyzed: 04/18/21

EPA 351.2

Total Kjeldahl Nitrogen	U	0.050	mg/L							U
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LCS (2104042-BS1)

Prepared: 04/17/21 Analyzed: 04/18/21

EPA 351.2

Total Kjeldahl Nitrogen	1.8820	0.050	mg/L	1.7500		108	90-110			
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Matrix Spike (2104042-MS1)

Source: E211612-07

Prepared: 04/17/21 Analyzed: 04/18/21

EPA 351.2

Total Kjeldahl Nitrogen	1.1960	0.050	mg/L	1.0000	0.26500	93.1	90-110			
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Matrix Spike (2104042-MS2)

Source: E211615-09

Prepared: 04/17/21 Analyzed: 04/18/21

EPA 351.2

Total Kjeldahl Nitrogen	1.5010	0.050	mg/L	1.0000	0.57300	92.8	90-110			
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Matrix Spike Dup (2104042-MSD1)

Source: E211612-07

Prepared: 04/17/21 Analyzed: 04/18/21

EPA 351.2

Total Kjeldahl Nitrogen	1.1710	0.050	mg/L	1.0000	0.26500	90.6	90-110	2.11	20	
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Matrix Spike Dup (2104042-MSD2)

Source: E211615-09

Prepared: 04/17/21 Analyzed: 04/18/21

EPA 351.2

Total Kjeldahl Nitrogen	1.4760	0.050	mg/L	1.0000	0.57300	90.3	90-110	1.68	20	
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MRL Verification (2104042-PS1)

Prepared: 04/17/21 Analyzed: 04/18/21

EPA 351.2

Total Kjeldahl Nitrogen	0.068000	0.050	mg/L	0.050000		136	70-130			MRL-2
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Batch 2104061 - C 2540 Solids

Blank (2104061-BLK1)

Prepared & Analyzed: 04/15/21

USGS I-3765-85

Total Suspended Solids	U	5.0	mg/L							U
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LCS (2104061-BS1)

Prepared & Analyzed: 04/15/21

USGS I-3765-85

Total Suspended Solids	104.50	5.0	mg/L	100.00		104	77.1-110			
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**Classical/Nutrient Analyses (CNA) - Quality Control**  
**US-EPA, Region 4, LSASD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2104061 - C 2540 Solids**

**LCS Dup (2104061-BSD1)**

Prepared & Analyzed: 04/15/21

**USGS I-3765-85**

Total Suspended Solids	106.10	5.0	mg/L	100.00		106	77.1-110	1.52	10	
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**Duplicate (2104061-DUP1)**

Source: E211612-07

Prepared & Analyzed: 04/15/21

**USGS I-3765-85**

Total Suspended Solids	125.40	5.0	mg/L		134.40			6.93	10	
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**MRL Verification (2104061-PS1)**

Prepared & Analyzed: 04/15/21

**USGS I-3765-85**

Total Suspended Solids	3.6000	5.0	mg/L	5.0000		72.0	57.1-130			MRL-2, U
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**Batch 2104062 - C 365.1 Ortho Phos**

**Blank (2104062-BLK1)**

Prepared & Analyzed: 04/15/21

**EPA 365.1**

Orthophosphate as P	U	0.010	mg/L							U
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**LCS (2104062-BS1)**

Prepared & Analyzed: 04/15/21

**EPA 365.1**

Orthophosphate as P	0.50200	0.010	mg/L	0.50050		100	90-110			
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**Matrix Spike (2104062-MS1)**

Source: E211612-03

Prepared & Analyzed: 04/15/21

**EPA 365.1**

Orthophosphate as P	0.65400	0.010	mg/L	0.50050	0.16800	97.1	90-110			
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**Matrix Spike Dup (2104062-MSD1)**

Source: E211612-03

Prepared & Analyzed: 04/15/21

**EPA 365.1**

Orthophosphate as P	0.65600	0.010	mg/L	0.50050	0.16800	97.5	90-110	0.305	10	
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**MRL Verification (2104062-PS1)**

Prepared & Analyzed: 04/15/21

**EPA 365.1**

Orthophosphate as P	0.010000	0.010	mg/L	0.010000		100	70-130			MRL-2
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**Batch 2104068 - C 300.0 Ion Chromat**

**Blank (2104068-BLK1)**

Prepared & Analyzed: 04/16/21

**EPA 300.0**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 21-0221

Project: 21-0221, Piney Point - Phase 2 - Reported by Floyd Wellborn

Classical/Nutrient Analyses (CNA) - Quality Control

US-EPA, Region 4, LSASD

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2104068 - C 300.0 Ion Chromat

Blank (2104068-BLK1)

Prepared & Analyzed: 04/16/21

Fluoride	U	0.050	mg/L							U
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LCS (2104068-BS1)

Prepared & Analyzed: 04/16/21

EPA 300.0

Fluoride	5.0040	0.050	mg/L	5.0000		100	90-110			
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Matrix Spike (2104068-MS1)

Source: E211612-07

Prepared & Analyzed: 04/16/21

EPA 300.0

Fluoride	2.1130	3.0	mg/L	1.0000	1.9930	12.0	90-110			D-4, XM-1
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Matrix Spike Dup (2104068-MSD1)

Source: E211612-07

Prepared & Analyzed: 04/16/21

EPA 300.0

Fluoride	2.0090	3.0	mg/L	1.0000	1.9930	1.60	90-110		10	D-4, XM-1
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MRL Verification (2104068-PS1)

Prepared & Analyzed: 04/16/21

EPA 300.0

Fluoride	0.044000	0.050	mg/L	0.050000		88.0	70-130			MRL-2
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Batch 2104070 - C 353.2 NO3-NO2

Blank (2104070-BLK1)

Prepared & Analyzed: 04/16/21

EPA 353.2

Nitrate/Nitrite as N	U	0.050	mg/L							U
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LCS (2104070-BS1)

Prepared & Analyzed: 04/16/21

EPA 353.2

Nitrate/Nitrite as N	0.49310	0.050	mg/L	0.50150		98.3	90-110			
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Matrix Spike (2104070-MS1)

Source: E211612-07

Prepared & Analyzed: 04/16/21

EPA 353.2

Nitrate/Nitrite as N	0.51280	0.050	mg/L	0.50150	0.015200	99.2	90-110			
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Matrix Spike Dup (2104070-MSD1)

Source: E211612-07

Prepared & Analyzed: 04/16/21

EPA 353.2

Nitrate/Nitrite as N	0.51520	0.050	mg/L	0.50150	0.015200	99.7	90-110	0.467	10	
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D.A.R.T. Id: 21-0221

Project: 21-0221, Piney Point - Phase 2 - Reported by Floyd Wellborn

**Classical/Nutrient Analyses (CNA) - Quality Control**

**US-EPA, Region 4, LSASD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2104070 - C 353.2 NO3-NO2**

**MRL Verification (2104070-PS1)**

Prepared & Analyzed: 04/16/21

**EPA 353.2**

Nitrate/Nitrite as N	0.051900	0.050	mg/L	0.050000		104	70-130			MRL-2
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**Batch 2104071 - C 300.0 Ion Chromat**

**Blank (2104071-BLK1)**

Prepared: 04/17/21 Analyzed: 04/18/21

**EPA 300.0**

Chloride	1.1960	0.10	mg/L							B-3
Sulfate as SO4	U	0.10	"							U

**LCS (2104071-BS1)**

Prepared: 04/17/21 Analyzed: 04/18/21

**EPA 300.0**

Chloride	246.31	0.10	mg/L	250.00		98.5	90-110			
Sulfate as SO4	244.61	0.10	"	250.00		97.8	90-110			

**Matrix Spike (2104071-MS1)**

Source: E211612-05

Prepared: 04/17/21 Analyzed: 04/18/21

**EPA 300.0**

Chloride	818.62		mg/L	200.00	563.22	128	90-110			QM-2
Sulfate as SO4	290.72		"	200.00	72.665	109	90-110			

**Matrix Spike Dup (2104071-MSD1)**

Source: E211612-05

Prepared: 04/17/21 Analyzed: 04/18/21

**EPA 300.0**

Chloride	759.03		mg/L	200.00	563.22	97.9	90-110	7.55	10	
Sulfate as SO4	268.04		"	200.00	72.665	97.7	90-110	8.12	10	

**MRL Verification (2104071-PS1)**

Prepared: 04/17/21 Analyzed: 04/18/21

**EPA 300.0**

Chloride	47.004	0.10	mg/L	50.000		94.0	70-130			MRL-2
Sulfate as SO4	45.306	0.10	"	50.000		90.6	70-130			MRL-2

**Batch 2104077 - C 365.1 TPhos**

**Blank (2104077-BLK1)**

Prepared: 04/17/21 Analyzed: 04/19/21

**EPA 365.1**

Total Phosphorus	U	0.010	mg/L							U
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 D.A.R.T. Id: 21-0221  
 Project: 21-0221, Piney Point - Phase 2 - Reported by Floyd Wellborn

**Classical/Nutrient Analyses (CNA) - Quality Control**  
**US-EPA, Region 4, LSASD**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2104077 - C 365.1 TPhos										
LCS (2104077-BS1)				Prepared: 04/17/21 Analyzed: 04/19/21						
EPA 365.1										
Total Phosphorus	0.37800	0.010	mg/L	0.37800		100	90-110			
Matrix Spike (2104077-MS1)				Source: E211612-05		Prepared: 04/17/21 Analyzed: 04/19/21				
EPA 365.1										
Total Phosphorus	0.65300	0.010	mg/L	0.50050	0.14700	101	90-110			
Matrix Spike (2104077-MS2)				Source: E211615-09		Prepared: 04/17/21 Analyzed: 04/19/21				
EPA 365.1										
Total Phosphorus	0.66300	0.010	mg/L	0.50050	0.15900	101	90-110			
Matrix Spike Dup (2104077-MSD1)				Source: E211612-05		Prepared: 04/17/21 Analyzed: 04/19/21				
EPA 365.1										
Total Phosphorus	0.65100	0.010	mg/L	0.50050	0.14700	101	90-110	0.307	10	
Matrix Spike Dup (2104077-MSD2)				Source: E211615-09		Prepared: 04/17/21 Analyzed: 04/19/21				
EPA 365.1										
Total Phosphorus	0.66600	0.010	mg/L	0.50050	0.15900	101	90-110	0.451	10	
MRL Verification (2104077-PS1)				Prepared: 04/17/21 Analyzed: 04/19/21						
EPA 365.1										
Total Phosphorus	0.0090000	0.010	mg/L	0.010000		90.0	70-130			MRL-2





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**Notes and Definitions for QC Samples**

U	The analyte was not detected at or above the reporting limit.
B-3	Level in blank does not impact data quality
D-4	MRL elevated due to interferences.
MRL-2	MRL verification for Non-Potable Water matrix
QM-2	Matrix Spike Recovery greater than method control limits
XM-1	Sample background/spike ratio higher than method evaluation criteria